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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/509,539

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Shigeyoshi Fujiwara

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EXAMINER

BARHAM, BETHANY P

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/509,539	Applicant(s) FUJIWARA ET AL.	
	Examiner BETHANY BARHAM	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,4,5,15-17 and 19-32 is/are pending in the application.
- 4a) Of the above claim(s) 19-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2,4,5 and 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

Receipt of Applicant's Response, Terminal disclaimer and Claim Amendments filed on 09/12/08 are acknowledged. Claims 2, 4-5, 15-17 and 19-32 are pending.

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/12/08 has been entered.

Restriction

Newly submitted claims 19-32 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Original claims were drawn to a powder, a product containing the powder and various uses of the powder on skin, the newly added claims are product by process and method of making claims.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 19-32 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03. Claims 2, 4-5, 15-17 are examined and rejected.

Due to Applicant's Claim Amendments and filing of the terminal disclaimer the 102 over '276, the 103 rejections over '359 in view of '652 and the 103 over '573 or '539 and double patenting rejections of record are hereby **withdrawn**. All other rejections of record are hereby **maintained**.

MAINTAINED REJECTIONS

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2, 4-5, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 05058624 A.

- '624 teaches the preparation of barium sulfate powder wherein the process for producing the powder starts with a) a barium ion such as barium compounds $\text{Ba}(\text{OH})_2$, BaCl_2 , etc ; b) in the presence of one or more metallic ion such as sodium ions Na_2SO_4 , NaHSO_4 , etc. Note the sodium ions contain sulfate ions (see the enclosed abstract).
- '624 teaches that the powder has a size of 4-20 microns (abstract).
- '624 teaches that the pigment is for use in cosmetics (abstract). It is the examiners opinion that the powder provides a barrier to the skin and prevents a

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roughening of the skin since it is the same powder and is described as being used in cosmetics.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4-5, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bloom et al (***J. Chem. Soc. A***, 1971, 833 – 836) in view of CA 2,374,539 ('539).

- Bloom et al teaches barium sulfate being doped with alkali metal salts, such as sodium (abstract, pg. 834, column 1, top).
- Bloom et al does not teach a size in microns or aspect ratio but teaches they were 0.5-3 Mrad.
- '539 teaches a doped barium sulfate of 0.0005 to 5 microns in diameter in the amount of 1-30% by weight (claims 1, 5-7 and pg. 12, line 43-pg. 13, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to size the doped Barium Sulfate particles of Bloom et al to be similar to that of '539. Both articles teach forming doped barium sulfate particles. One of ordinary skill in the art would know how to optimize the ranges of Bloom et al and '539, as the MPEP 2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

Claims 2, 4-5, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 05058624 A in view of US 6,632,276 ('276).

- '624 is taught above and teaches doped barium sulfate powder with a size of 4-20 microns for use in cosmetics (abstract). It is the examiners opinion that the powder provides a barrier to the skin and prevents a roughening of the skin since it is the same powder and is described as being used in cosmetics (as instant claimed in claim 9-11 and 15-17).
- '624 does not teach aspect ratio of the particles.
- '276 teaches the preparation of barium sulfate with a size of less than 200 microns, preferably less than 50 microns, with an aspect ratio of more than 3, and in particular more than 5 (col. 2, lines 21-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to measure the aspect ratio of a particle of barium sulfate of substantially the same size ('624) as taught by '276. '276 teaches that a barium sulfate particle with a size overlapping with '624 has an aspect ratio of more than 3 is known. A skilled artisan would know how to optimize the aspect ratio of '624 and '276, as the MPEP 2144.05 states "Where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation."

Response to Arguments

Applicant's arguments with respect to claims 2, 4-5, and 15-17 have been considered but are not persuasive. Applicant argues that the method described in '624 does not form the metal doped barium sulfate and that the instant claims are drawn to a

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2-step method of A (barium) + B (sulfate) mixed and then added to C (sodium), or A+C mixed and added to B. However, the Examiner respectfully points out that the instant claims are drawn to the product and/or powder composition and not the method. Bloom et al teaches that a mixture of barium chloride (A) and sodium sulfate (B+C) produced barium sulfate that was 'doped' with sodium ions (pg. 34, col. 1 and Fig. 1). Thus it would appear that the '624 reaction of barium chloride and sodium sulfate would also predictably produce barium sulfate that was 'doped' with sodium ions as shown by Bloom et al.

Applicant cannot argue method claims against the instant composition or use claims of 2, 4-5 and 15-17. MPEP 2113 states:

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. In re Fessmann, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983).

Thus the burden shifts to Applicant to show that the prior art does not teach the instant claimed powder, product and use of product.

Applicant also argue that the rejection of '624, '624 in view of '276 and Bloom et al in view of '539 is improper, because the art ('624 or Bloom et al in view of '539) is silent with respect to the aspect ratio or zeta potential. The examiner respectfully

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disagrees, the prior art teaches a composition and the same particle size (ie '624 particle size of 4-20 microns) described by applicants instant application, but applicants observation that it also has 'aspect ratio of 3-250' or 'negative zeta potential' does not give it patentable weight, since it is the same powder of the same size, as adding a characterization to a prior art patented invention is not patentable. Absent a showing of unexpected results by Applicant that the particles have different aspect ratios or zeta potential values, the rejection stands. The Office is not equipped to test the instant claims against the prior art, and as such the burden falls to Applicant to produce a side-by-side comparison, measurement, statistical data, showing that the particles formed result in divergent aspect ratios from the instant claimed particles.

Applicant is claiming a physical property of the compound of the same composition and size as taught in the art. MPEP 716.02 states "Evidence of unobvious or unexpected advantageous properties, such as superiority in a property the claimed compound shares with the prior art, can rebut *prima facie* obviousness. " Evidence that a compound is unexpectedly superior in one of a spectrum of common properties . . . can be enough to rebut a *prima facie* case of obviousness." No set number of examples of superiority is required. *In re Chupp*, 816 F.2d 643, 646, 2 USPQ2d 1437, 1439 (Fed. Cir. 1987)". The burden is on Applicant to provide such evidence and arguments do not take the place of such evidence.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)272-6175. The examiner can normally be reached on M-F, 8:30 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bethany Barham
Art Unit 1615

/Tracy Vivlemore/
Primary Examiner, Art Unit 1635